



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1166; Project Identifier MCAI-2021-00952-R; Amendment 39-21953; AD 2022-05-02]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2021-11-25, which applied to certain Airbus Helicopters (type certificate previously held by Eurocopter France) Model AS350B3 and EC130T2 helicopters. AD 2021-11-25 required revising the existing rotorcraft flight manual (RFM) for your helicopter by inserting a new procedure (temporary). Since the FAA issued AD 2021-11-25, the manufacturer identified an additional affected full authority digital engine control (FADEC) part number and developed an optional modification for the affected FADECs. This AD requires revising the existing RFM for your helicopter by inserting a new procedure (temporary). This AD also requires, for helicopter on which an optional terminating action (installation of serviceable FADECs) was done, removing the applicable temporary procedure from the existing RFM for your helicopter. In addition, this AD also adds helicopters to the applicability. Furthermore, this AD prohibits the installation of an affected FADEC. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of July 29, 2021 (86 FR 33097, June 24, 2021).

ADDRESSES: For Airbus Helicopters service information identified in this final rule, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. For Safran Turbomeca service information identified in this NPRM contact Safran Helicopter Engines, S.A., 64511 Bordes, France; phone: +33 (0) 5 59 74 45 11. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. Service information that is incorporated by reference is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1166.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1166; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2021-11-25, Amendment 39-21587 (86 FR 33097, June 24, 2021), (AD 2021-11-25). AD 2021-11-25 applied to Airbus Helicopters (type certificate previously held by Eurocopter France) Model AS350B3 and EC130T2 helicopters with an ARRIEL 2D engine and THALES FADEC part number (P/N) C13165DA00 without

amendment A or THALES FADEC P/N C13165FA00 without amendment B, installed. The NPRM published in the *Federal Register* on December 28, 2021 (86 FR 73703). In the NPRM, the FAA proposed to require revising the existing RFM for your helicopter by inserting a new procedure (temporary). The NPRM also proposed to require, for helicopters on which an optional terminating action (installation of serviceable FADECs) is done, removing the applicable temporary procedure from the existing RFM for your helicopter. In addition, the NPRM also proposed to add helicopters to the applicability. Furthermore, the NPRM proposed to prohibit the installation of an affected FADEC.

AD 2021-11-25 was prompted by EASA AD 2013-0287, dated December 5, 2013 (EASA AD 2013-0287), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Eurocopter (formerly Eurocopter France, Aerospatiale) Model AS 350 B3 and EC 130 T2 helicopters with an ARRIEL 2D engine and THALES FADEC P/N C13165DA00 or P/N C13165FA00 installed. EASA advised that there was a report of an in-flight event where the pilot noticed that the temporary amber governor (GOV) light had illuminated, followed by the failure of the vehicle engine monitoring display (VEMD) screens, and no availability of the automatic or auxiliary engine back-up control ancillary unit (EBCAU). Subsequent investigation identified an internal failure of the engine digital electronic control unit (DECU), which led to loss of fuel flow regulation (frozen fuel metering unit). This failure was not indicated to the pilot by a red GOV warning light as expected, but with amber GOV indication and loss of VEMD display instead. EASA also advised that if this fuel metering unit is frozen in the open position, it may lead to a rotor overspeed, and if it is frozen in the closed position, it may lead to unavailability of engine power. EASA stated that this condition, if not addressed, could result in the pilot identifying the type of failure condition incorrectly, possibly resulting in an improper response.

Since the FAA issued AD 2021-11-25, EASA issued AD 2021-0195, dated August 20, 2021 (EASA AD 2021-0195), which supersedes EASA AD 2013-0287. EASA advises that after EASA AD 2013-0287 was issued, Airbus Helicopters revised Alert Service Bulletin No. AS350-01.00.67, Revision 2, dated February 17, 2014; and Alert Service Bulletin No. EC130-04A004, Revision 2, dated February 17, 2014; to

include an additional affected part number as part of the same rectification campaign. Additionally, EASA advises that in parallel, SAFRAN (formerly Turboméca) developed a modification of the affected part, which mitigates the risk of rotor speed fluctuations, loss of power or uncommanded in-flight shutdown, and issued Service Bulletin 292 73 2852 providing FADEC replacement instructions. Consequently, Airbus Helicopters issued the applicable ASBs, providing instructions to remove the temporary procedure from the RFM Emergency Procedures section for helicopters with a modified FADEC. Accordingly, EASA AD 2021-0195 retains the requirements of EASA AD 2013-0287 and requires removing the temporary revision from the Emergency Procedures section of the RFM for helicopters with a modified FADEC installed. EASA AD 2021-0195 also prohibits the installation of an affected part after installation of a modified FADEC. Furthermore, EASA AD 2021-0195 specifies to “inform all flight crews” of revisions to the RFM, and thereafter to “operate the helicopter accordingly.”

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin No. AS350-01.00.67, Revision 2, dated February 17, 2014; and Alert Service Bulletin No. EC130-04A004, Revision 2, dated February 17, 2014; which the Director of the Federal Register

approved for incorporation by reference as of July 29, 2021.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Safran Turbomeca Mandatory Service Bulletin No. 292 73 2852, Revision C, dated June 6, 2016. This service information specifies replacing certain FADEC D EECUs with certain amended FADEC D EECUs.

Differences Between this AD and the EASA AD

EASA AD 2021-0195 requires operators to “inform all flight crews” of revisions to the RFM, and thereafter to “operate the helicopter accordingly.” However, this AD does not specifically require those actions.

FAA regulations mandate compliance with only the operating limitations section of the flight manual. The flight manual changes required by this AD apply to the emergency procedures section of the existing RFM for your helicopter. Furthermore, compliance with such requirements in an AD is impracticable to demonstrate or track on an ongoing basis; therefore, a requirement to operate the aircraft in such a manner is unenforceable. Nonetheless, the FAA recommends that flight crews of the helicopters listed in the applicability operate in accordance with the revised emergency procedures specified in this AD.

Costs of Compliance

The FAA estimates that this AD affects up to 628 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Revising the existing RFM for your helicopter takes about 0.25 work-hour for an estimated cost of \$21 per helicopter and up to \$13,188 for the U.S. fleet.

Accomplishing the optional terminating action, if done, takes about 1 work-hour, with a parts costs of \$5,000, for an estimated cost of \$5,085 per helicopter.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive 2021-11-25, Amendment 39-21587 (86 FR 33097, June 24, 2021); and

b. Adding the following new airworthiness directive:

2022-05-02 Airbus Helicopters (Type Certificate Previously Held by Eurocopter France): Amendment 39-21953; Docket No. FAA-2021-1166; Project Identifier MCAI-2021-00952-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2021-11-25, Amendment 39-21587 (86 FR 33097, June 24, 2021) (AD 2021-11-25).

(c) Applicability

This AD applies to Airbus Helicopters (type certificate previously held by Eurocopter France) Model AS350B3 and EC130T2 helicopters, certificated in any category, with an ARRIEL 2D engine and with THALES full authority digital engine control (FADEC) part number (P/N) C13165DA00 without amendment A, P/N C13165DA00PC00 without amendment A, or P/N C13165FA00 without amendment B, that has a serial number below 1736, installed.

Note 1 to paragraph (c): Helicopters with a Model AS350B3e designation are Model AS350B3 helicopters.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 7321, Engine Fuel Control/Turbine Engines.

(e) Unsafe Condition

This AD was prompted by a report of failure of an engine digital electronic control unit. The FAA is issuing this AD to prevent incorrect indicator illumination, display failure, and loss of fuel flow regulation (frozen fuel metering unit). The unsafe

condition, if not addressed, could result in misleading information to the pilot, rotor overspeed or unavailability of engine power, and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Revision to the Existing Rotorcraft Flight Manual (RFM) for Your Helicopter and Optional Terminating Action for Certain Helicopters with New Optional Terminating Action

For helicopters with FADEC P/N C13165DA00 without amendment A or P/N C13165FA00 without amendment B installed:

(1) Within 25 hours time-in-service after July 29, 2021 (the effective date of AD 2021-11-25), revise the Emergency Procedures of the existing RFM for your helicopter by inserting Appendix 4. of Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-01.00.67 or ASB No. EC130-04A004, each Revision 2 and dated February 17, 2014 (ASB AS350-01.00.67 or ASB EC130-04A004), as applicable to your helicopter model. Inserting a different document with information identical to that in Appendix 4. of ASB AS350-01.00.67 or ASB EC130-04A004, as applicable to your helicopter model, is acceptable for compliance with the requirement of this paragraph.

(2) As an optional terminating action for the requirement of paragraph (g)(1) of this AD, install amendment A on FADEC P/N C13165DA00 or amendment B on FADEC P/N C13165FA00.

(3) As an optional terminating action for the requirement of paragraph (g)(1) of this AD, install a FADEC unit having P/N C13165DA00 with amendment A, P/N C13165DA00PC00 with amendment A, or P/N C13165FA00 with amendment B; or install a FADEC unit other than a FADEC unit having P/N C13165DA00, P/N C13165DA00PC00, or P/N C13165FA00, that has a serial number below 1736.

(h) New Requirement: Revision to the Existing RFM for Your Helicopter and Optional Terminating Action for Certain Other Helicopters

For helicopters that have FADEC P/N C13165DA00PC00 without amendment A installed:

(1) Within 25 hours time-in-service after the effective date of this AD, revise the existing RFM for your helicopter by inserting Appendix 4. of ASB AS350-01.00.67 or ASB EC130-04A004, as applicable to your helicopter model. Inserting a different document with information identical to that in Appendix 4. of ASB AS350-01.00.67 or ASB EC130-04A004, as applicable to your helicopter model, is acceptable for compliance with the requirement of this paragraph.

(2) As an optional terminating action for the requirement of paragraph (h)(1) of this AD, install amendment A on FADEC P/N C13165DA00PC00.

(3) As an optional terminating action for the requirement of paragraph (h)(1) of this AD, install a FADEC unit having P/N C13165DA00 with amendment A, P/N C13165DA00PC00 with amendment A, or P/N C13165FA00 with amendment B; or install a FADEC unit other than a FADEC unit having P/N C13165DA00, P/N C13165DA00PC00, or P/N C13165FA00, that has a serial number below 1736.

(i) New Requirement: Removal of Temporary Revision from the Existing RFM for Your Helicopter

(1) For helicopters that accomplish the optional terminating action specified in paragraph (g)(2) or (3) of this AD: Concurrently with the installation, before further flight, remove the temporary revision to the existing RFM for your helicopter that was inserted in accordance with the requirement of paragraph (g)(1) of this AD.

(2) For helicopters that accomplish the optional terminating action specified in paragraph (h)(2) or (3) of this AD: Concurrently with the installation, before further flight, remove the temporary revision to the existing RFM for your helicopter that was inserted in accordance with the requirement of paragraph (h)(1) of this AD.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install on any helicopter a FADEC identified in paragraph (c) of this AD (affected FADEC part).

Note 2 to paragraph (j): Removal of an affected FADEC part from a helicopter and reinstallation of that same affected FADEC part on the same helicopter during the same maintenance visit is not considered “install” as specified in paragraph (j) of this AD.

(k) Special Flight Permits

Special flight permits may be issued to operate the helicopter to a location where the actions specified in this AD can be performed, provided no passengers are onboard.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (m)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(m) Related Information

(1) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0195, dated August 20, 2021. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2021-1166.

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on July 29, 2021 (86 FR 33097, June 24, 2021).

(i) Airbus Helicopters Alert Service Bulletin No. AS350-01.00.67, Revision 2, dated February 17, 2014.

(ii) Airbus Helicopters Alert Service Bulletin No. EC130-04A004, Revision 2, dated February 17, 2014.

(4) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(5) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on February 16, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-03761 Filed: 2/22/2022 8:45 am; Publication Date: 2/23/2022]